

Juniata Shops, Power Plant and Boiler House  
East of Fourth Avenue at Second Street  
Altoona  
Blair County  
Pennsylvania

HAER No. PA-232-I

HAER  
PA,  
7-ALTO,  
4-I-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

JUNIATA SHOPS, POWER PLANT AND BOILER HOUSE

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Location: East of Fourth Avenue at Second Street, Altoona, Blair County, Pennsylvania  
USGS Quad: Altoona, Pennsylvania (1:24000)  
UTM: 17 E.721500 N.4489960

Date of Construction: 1890

Builder: Pennsylvania Railroad

Present Owner: Conrail

Present Use: Manufacturing Railroad Rolling Stock

Significance: The Power Plant and Boiler House was one of the four original buildings constructed at Juniata in 1888-90.

Project Information: This project was undertaken by HAER in conjunction with America's Industrial Heritage Project as part of an architectural survey covering a nine-county region in Southwestern Pennsylvania, Randall Cooley, Director. See HAER No. PA-108, Pennsylvania Railroad, Altoona Works, Altoona, Blair County, Pennsylvania for further project information and documentation.

Compiler: Peter Stott, Historian  
Gray Fitzsimons, Editor

### History:

A 70' x 43' boiler house was one of the four original buildings constructed at Juniata in 1888-90. A 1900 photograph (#5,095 in the Altoona Public Library) shows the one-story building, with a gable-roof, segmental-arched windows in the longitudinal facades, and corrugated metal siding at the gable ends. The building housed six boilers, and a 130-foot iron chimney rose directly behind it. This building, more than doubled in length to 150' x 45', in 1925 was known as Boiler House No. 1.

A second building, also built in 1888-90, and known originally as the "Electric and Hydraulic Building," which measured 60' x 45' in plan, was located about 130' to the west. Steam from Boiler House No. 1 supplied the generators within the Electric and Hydraulic Building. Its interior was lit by large, paired, double-hung, sash windows and a high, glazed, round-arched entrance centered in the east wall (Photo #5,097, ca. 1900). By 1925 this building, then identified as the Power Plant, had also been expanded to 150' x 45' in plan.

Boiler House No. 2 (52' x 47'), was erected in 1925 at the end closest to the craneway to take care of the needs of the new erecting and machine shop. Mechanical equipment consisted of two 516 horsepower boilers, mechanical stokers, and feed water heaters, a facility designed to provide the 300-pound steam pressure used for testing locomotives, as well as for general heating and power purposes. Equipment also included a reciprocating steam air compressor, which is still in place and occasionally operated.

In 1955 the buildings were joined by modern glazed brick and a new stack. At the same time, turbine generator sets were installed in the power plant.

### Sources:

- "The Altoona Shops of the Pennsylvania Railroad," American Engineer and Railroad Journal 70 (6 parts, June-December 1896), pp. 89-93, 165-169, 203-206, 241-245, 279-284, 317-320).
- Baxter, W.W. "Pennsylvania Railroad Reconstructs Juniata Shops," Railway Review 30 (January 1926), pp. 226-231.
- Grimshaw, Fred G., "History of the Pennsylvania Railroad Company in Blair County," Chapter XXII in George A. Wolf, ed., Blair County's First Hundred Years, 1846-1946 (Altoona: The Mirror Press, 1946).
- Loveless, Wait Reynolds. "Electric Power in the P.R.R. Shops at Altoona, Pennsylvania," Electrical World 48:7 (18 August 1906), pp. 323-326.
- Pennsylvania Railroad Company. 44th Annual Report of the Board of Directors of the Pennsylvania Railroad Company (10 March 1891), p. 139.
- Sanborn Map Company. Fire Insurance Maps of Altoona, Pennsylvania: 1894.
- Sell, Jesse C. Twentieth Century History of Altoona and Blair County, Pennsylvania and Representative Citizens (Chicago: Richmond-Arnold Publishing Co., 1911), pp. 332-336.
- Taylor, J.V. "History of the City of Altoona and Pennsylvania Railroad Shops," Altoona Mirror (or Tribune?) 13 June 1939 (clipping file, Altoona Public Library).
- Warren, Frederic Blount. "A Railroad University: Altoona and its Methods," Scientific American Supplement 63 (29 June 1907), pp. 26323-26325.

ADDENDUM TO:  
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